M E M O R A N D U M

December 15, 1980

TO: CARL SCHROEDER, Manager
Field Operations Branch

THROUGH: ROSS SINGLETON, Environmental Supervisor
Field Operations Branch

FROM: ROBERT KOENTOP, Environmental Specialist RK
Field Operations Branch

SUBJECT: Monitoring System - A. L. Taylor Site

On December 8, 1980, while accompanied by Art Curtis, Mike Evans and Kent Anderson (the latter two representing the Federal EPA - Washington, D.C.), I made an inspection of the leachate flowing into the large collection ditch adjacent to the settling pond (NOTE: the pond was pumped down completely the previous week, thereby allowing leachate to flow freely into the ditch).

Approximately 75 feet of ditch bottom was covered by the leachate (see attached map).

Because of the heavy concentration of leachate entering the ditch (as has been observed ever since the collection ditch has been constructed - March 1979) coupled by the piece-meal influent analyses apparently showing low concentrations of organics in the pond; one may assume the leachate materials (organics and metals) are accumulating within the sediment of the trenches.

NOTE: Directly adjacent to this collection ditch are areas where past state inspections have witnessed drums buried in trenches, and past EPA "spot digs" have unearthed deteriorating drums.

With these observations stated, I propose the following two-part monitoring program:

1. Core-sample and analyze the sediment within the large collection ditch (NOTE: since its installation, the ditch has been filled with approximately 2-3 feet of sediment).

It must be also noted that 126 Primary Pollutants were detected on site, in addition to various toxic metals. The core sample could be tested for:

(a) concentrations of the detected 126 Primary Pollutants
(b) Toxic metals, including: Hg, Pb, Cd, Cr and Ba

Coupled with these analyses, the second part of the monitoring program would include a core sample just east of the site (on the direct opposite side of the trench from where the leachate is entering - see attached map). This would detect any migration of toxic materials from the site.

NOTE: Wilson Creek, which eventually empties into the Ohio River, is directly east of the aforementioned collection ditch.

Again, because of the concentrated leachate entering the ditch, coupled by both the amount of sediment present and lack of detection of toxic materials in the pond's influent, one can genuinely assume all waste materials are entering the ditch's sediment.

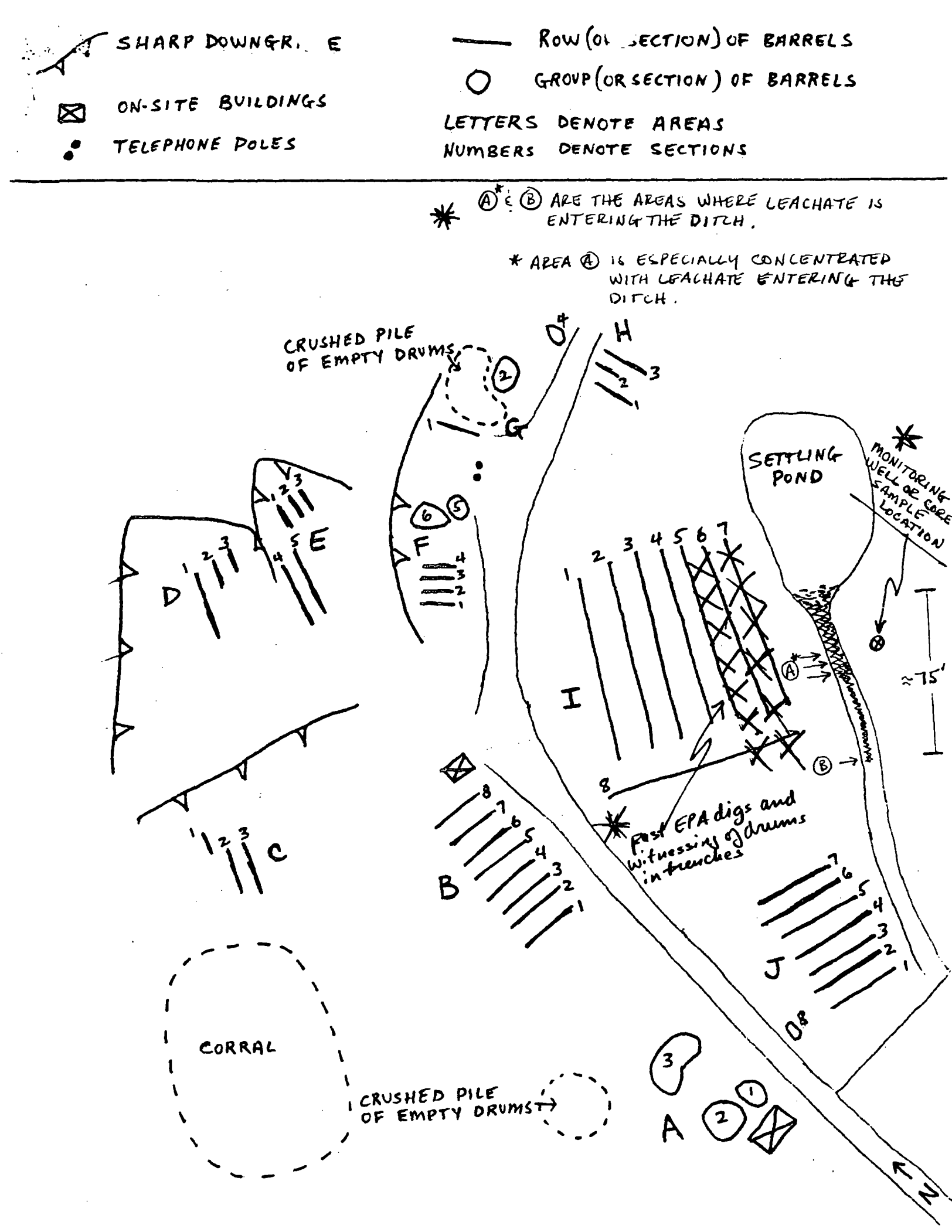
With this assumption stated, and the complete lack of evidence showing any migration possibilities or probabilities of materials moving from within the ditch to off-site, I feel this proposed monitoring program should be thoroughly reviewed.

NOTE: With leachate flowing into the ditch for nearly two (2) years, it would not be unreasonable to assume toxic materials (from that leachate) would migrate laterally across a ten (10) foot wide trence to a location off-site.

RK/lrw

Attachment

cc: Art Curtis
Warren Peace
Shane Hitchcock


SHARP DOWNGR. E
ON-SITE BUILDINGS
TELEPHONE POLES
ROW (OR SECTION) OF BARRELS
GROUP (OR SECTION) OF BARRELS
LETTERS DENOTE AREAS
NUMBERS DENOTE SECTIONS
* Ⓐ & Ⓑ ARE THE AREAS WHERE LEACHATE IS ENTERING THE DITCH.
* AREA Ⓐ IS ESPECIALLY CONCENTRATED WITH LEACHATE ENTERING THE DITCH.
CRUSHED PILE OF EMPTY DRUMS
SETTLING POND
MONITORING WELL OR CORE SAMPLE LOCATION
≈75'
Ⓐ
Ⓑ
Past EPA digs and witnessing of drums in trenches
CORRAL
CRUSHED PILE OF EMPTY DRUMS
A
B
C
D
E
F
G
H
I
J
N